

**IN THE CLAIMS**

Please amend the claims as follows:

1-8. (canceled)

9. (Currently amended) An apparatus, comprising ~~an~~ a free-space optical fan-out and broadcast interconnect including:

a plurality of nodes positioned to define a node array, each of the plurality of nodes having an optical signal emitter and a plurality of optical signal receivers positioned to define a receiver array that substantially corresponds to the node array, wherein the optical signal emitter of all of the plurality of nodes and the plurality of optical signal receivers of all of the plurality of nodes are substantially coplanar; and

a plurality of optics optically coupled to the array of nodes, the plurality of optics positioned to define an optics array that substantially corresponds to the node array and the receiver array, each of the plurality of optics including a diverging element and a light collecting and focusing element, wherein the diverging element of all of the plurality of optics and the light collecting and focusing element of all of the plurality of optics are substantially coplanar, wherein an optical signal from the optical signal emitter is fanned-out by the diverging element of one of the optics and broadcast to one of the plurality of receivers of all of the plurality of nodes by the light collecting and focusing element of all of the plurality of optics; and  
a reflective structure optically coupled to the array of optics, wherein the optical signal is reflected by the reflective structure after the optical signal is fanned-out.

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10-118. (Cancelled)